IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A wireless communication method of performing information transmission in a network including a plurality of communication stations, said method ~~station~~ comprising ~~the steps of~~:

measuring the time when data addressed thereto is received;

preserving said measured time;

computing a differential time between the time measured when the next data addressed thereto is received and said preserved time;

preserving said differential time;

computing an average value of said preserved differential time; and

controlling standby power at receiving time using said computed average differential time.

Claim 2 (Currently Amended): The wireless communication method according to claim 1, wherein in said ~~step for~~ controlling said standby power at receiving time, said standby power at receiving time is lowered to enter a sleep state when reception of data is completed and said standby power at receiving time is raised to enter an active state after said average differential time is passed.

Claim 3 (Currently Amended): The wireless communication method according to claim 1, wherein in said ~~step for~~ controlling said standby power at receiving time, said standby power at receiving time is lowered to enter a sleep state when reception of data is completed and said standby power at receiving time is raised to enter an active state after said average differential time is passed; and then if there is no data received, operations of making

the differential time, in which the standby power at receiving time is lowered to enter a sleep state, extend to be longer than the previous differential time to again enter the sleep state, and entering the active state again after the renewed differential time is passed are repeated.

Claim 4 (Original): The wireless communication method according to claim 3, wherein the maximum value of said differential time is set to be a beacon interval time.

Claim 5 (Currently Amended): A wireless communication method of performing information transmission in a network including a plurality of communication stations, said method ~~station~~ comprising ~~the steps of~~:

measuring the time when data addressed thereto is received;

preserving said measured time;

computing a differential time between the time measured when the next data addressed thereto is received and said preserved time;

preserving said differential time; and

controlling standby power at receiving time using the minimum differential time among values of said differential time preserved in the past.

Claim 6 (Currently Amended): The wireless communication method according to claim 5, wherein in said ~~step for~~ controlling said standby power at receiving time, said standby power at receiving time is lowered to enter a sleep state when reception of data is completed and said standby power at receiving time is raised to enter an active state after said minimum differential time is passed.

Claim 7 (Currently Amended): The wireless communication method according to claim 5, wherein in said ~~step for~~ controlling said standby power at receiving time, said standby power at receiving time is lowered to enter a sleep state when reception of data is completed and said standby power at receiving time is raised to enter an active state after said minimum differential time is passed; and then if there is no data received, operations of making the differential time, in which the standby power at receiving time is lowered to enter a sleep state, extend to be longer than the previous differential time to again enter the sleep state, and entering the active state again after the renewed differential time is passed are repeated.

Claim 8 (Original): The wireless communication method according to claim 7, wherein the maximum value of said differential time is set to be a beacon interval time.

Claim 9 (Currently Amended): A wireless communication method of performing information transmission in a network including a plurality of communication stations, said method ~~station~~ comprising ~~the steps of~~:

measuring the time when data addressed thereto is received;

preserving said measured time;

computing a differential time between the time measured when the next data addressed thereto is received and said preserved time;

preserving said differential time;

computing an optimal differential time from among values of said differential time preserved in the past using a ~~an arbitrary~~ prediction function; and

controlling standby power at receiving time using said computed optimal differential time.

Claim 10 (Currently Amended): The wireless communication method according to claim 9, wherein in said ~~step for~~ controlling said standby power at receiving time, said standby power at receiving time is lowered to enter a sleep state when reception of data is completed and said standby power at receiving time is raised to enter an active state after said optimal differential time is passed.

Claim 11 (Currently Amended): The wireless communication method according to claim 9, wherein in said ~~step for~~ controlling said standby power at receiving time, said standby power at receiving time is lowered to enter a sleep state when reception of data is completed and said standby power at receiving time is raised to enter an active state after said optimal differential time is passed; and then if there is no data received, operations of making the differential time, in which the standby power at receiving time is lowered to enter a sleep state, extend to be longer than the previous differential time to again enter the sleep state, and entering the active state again after the renewed differential time is passed are repeated.

Claim 12 (Original): The wireless communication method according to claim 11, wherein the maximum value of the optimal differential time is set to be a beacon interval time.

Claim 13 (Currently Amended): A wireless communication apparatus comprising:

a unit configured to measure ~~for measuring~~ the time when data addressed thereto is received;

a unit configured to preserve ~~for preserving~~ said measured time;

a unit configured to compute ~~for computing~~ a differential time between the time measured when the next data addressed thereto is received and said preserved time;

a unit configured to preserve ~~for preserving~~ said differential time;

a unit configured to compute ~~for computing~~ an average value of said preserved differential time; and

a unit configured to control ~~for controlling~~ standby power at receiving time using said computed average differential time.

Claim 14 (Currently Amended): The wireless communication apparatus according to claim 13, wherein said unit configured to control ~~for controlling~~ said standby power at receiving time is configured to make ~~makes~~ said standby power at receiving time lower to enter a sleep state when reception of data is completed and is configured to make ~~makes~~ said standby power at receiving time rise to enter an active state after said optimal differential time is passed.

Claim 15 (Currently Amended): The wireless communication apparatus according to claim 13, wherein said unit configured to control ~~for controlling~~ said standby power at receiving time is configured to make ~~makes~~ said standby power at receiving time lower to enter a sleep state when reception of data is completed and is configured to make ~~makes~~ said standby power at receiving time rise to enter an active state after said average differential time is passed; and

then if there is no data received, said unit configured to control ~~for controlling~~ said standby power at receiving time is configured to repeat ~~repeats~~ operations of making the differential time, in which the standby power at receiving time is lowered to enter a sleep state, extend to be longer than a previous differential time to again enter the sleep state, and entering the active state again after the renewed differential time is passed.

Claim 16 (Original): The wireless communication apparatus according to claim 15, wherein the maximum value of said differential time is set to be a beacon interval time.

Claim 17 (Currently Amended): A wireless communication apparatus comprising:

a unit configured to measure ~~for measuring~~ the time when data addressed thereto is received;

a unit configured to preserve ~~for preserving~~ said measured time;

a unit configured to compute ~~for computing~~ a differential time between the time measured when the next data addressed thereto is received and said preserved time;

a unit configured to preserve ~~for preserving~~ said differential time; and

a unit configured to control ~~for controlling~~ standby power at receiving time using the minimum differential time among values of said differential time preserved in the past.

Claim 18 (Currently Amended): The wireless communication apparatus according to claim 17, wherein said unit configured to control ~~for controlling~~ said standby power at receiving time is configured to make ~~makes~~ said standby power at receiving time lower to enter a sleep state when reception of data is completed and is configured to make ~~makes~~ said standby power at receiving time rise to enter an active state after said minimum differential time is passed.

Claim 19 (Currently Amended): The wireless communication apparatus according to claim 17, wherein said unit configured to control ~~for controlling~~ said standby power at receiving time is configured to make ~~makes~~ said standby power at receiving time lower to enter a sleep state when reception of data is completed and is configured to make ~~makes~~ said

standby power at receiving time rise to enter an active state after said minimum differential time is passed; and

then if there is no data received, said unit configured to control ~~for controlling~~ said standby power at receiving time is configured to repeat ~~repeats~~ operations of making the differential time, in which the standby power at receiving time is lowered to enter a sleep state, extend to be longer than the previous differential time to again enter the sleep state, and entering the active state again after the renewed differential time is passed.

Claim 20 (Original): The wireless communication apparatus according to claim 19, wherein the maximum value of said differential time is set to be a beacon interval time.

Claim 21 (Currently Amended): A wireless communication apparatus comprising:

a unit configured to measure ~~for measuring~~ the time when data addressed thereto is received;

a unit configured to preserve ~~for preserving~~ said measured time;

a unit configured to compute ~~for computing~~ a differential time between the time measured when the next data addressed thereto is received and said preserved time;

a unit configured to preserve ~~for preserving~~ said differential time;

a unit configured to compute ~~for computing~~ an optimal differential time from among values of said differential time preserved in the past using a ~~an arbitrary~~ prediction function; and

a unit configured to control ~~for controlling~~ standby power at receiving time using said computed optimal differential time.

Claim 22 (Currently Amended): The wireless communication apparatus according to claim 21, wherein said unit configured to control ~~for controlling~~ said standby power at receiving time is configured to make ~~makes~~ said standby power at receiving time lower to enter a sleep state when reception of data is completed and is configured to make ~~makes~~ said standby power at receiving time rise to enter an active state after said optimal differential time is passed.

Claim 23 (Currently Amended): The wireless communication apparatus according to claim 21, wherein said unit configured to control ~~for controlling~~ said standby power at receiving time is configured to make ~~makes~~ said standby power at receiving time lower to enter a sleep state when reception of data is completed and is configured to make ~~makes~~ said standby power at receiving time rise to enter an active state after said optimal differential time is passed; and

then if there is no data received, said unit configured to control ~~for controlling~~ said standby power at receiving time is configured to repeat ~~repeats~~ operations of making the differential time, in which the standby power at receiving time is lowered to enter a sleep state, extend to be longer than the previous differential time to again enter the sleep state, and entering the active state again after the renewed differential time is passed.

Claim 24 (Original): The wireless communication apparatus according to claim 23, wherein the maximum value of the optimal differential time is set to be a beacon interval time.

Claim 25 (New): The wireless communication apparatus according to claim 21, wherein unit configured to compute an optimal differential time is configured to compute an

optimal differential time from among values of said differential time preserved in the past using a fuzzy theory algorithm, a neural network theory algorithm, a genetic algorithm, or a chaos theory algorithm.

Claim 26 (New): The wireless communication method according to claim 9, wherein said computing an optimal differential time includes computing an optimal differential time from among values of said differential time preserved in the past using a fuzzy theory algorithm, a neural network theory algorithm, a genetic algorithm, or a chaos theory algorithm.